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| APPLICATION NO. | FILING DATE                        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------|------------------------------------|----------------------|-------------------------|------------------|
| 09/905,207      | 07/13/2001                         | Yishao Max Huang     | 02MICRO.02.10           | 1773             |
| 32047           | 7590 12/16/2004                    |                      | EXAMINER                |                  |
|                 | N, TUCKER, PERRE                   | KNOWLIN, THJUAN P    |                         |                  |
|                 | COMMERICAL STREET<br>TER, NH 03101 |                      | ART UNIT                | PAPER NUMBER     |
|                 | ,                                  |                      | 2642                    |                  |
|                 |                                    |                      | DATE MAILED: 12/16/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)   |  |  |  |  |
|--|--|--|--|--|--|--|
|  | 09/905,207   | HUANG ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit   |  |  |  |  |
|  | Thjuan P Knowlin   | 2642   |  |  |  |  |
| The MAILING DATE of this communic Period for Reply   | ation appears on the cover sheet wit   | th the correspondence address  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commur  - If the period for reply specified above is less than thirty (30)  - If NO period for reply is specified above, the maximum statu  - Failure to reply within the set or extended period for reply wi Any reply received by the Office later than three months after earned patent term adjustment. See 37 CFR 1.704(b). | ATION. 37 CFR 1.136(a). In no event, however, may a re nication. days, a reply within the statutory minimum of thirty tory period will apply and will expire SIX (6) MONT II, by statute, cause the application to become ABA        | ply be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133). |  |  |  |  |
| Status   |  |  |  |  |  |  |
| 1) Responsive to communication(s) filed  | on <u>13 July 2001</u> .   |  |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b   |  |  |  |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.                    |  |  |  |  |  |
| Disposition of Claims  |  |  |  |  |  |  |
| 4) ⊠ Claim(s) <u>1-20</u> is/are pending in the appear 4a) Of the above claim(s) is/are 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1-20</u> is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction  | withdrawn from consideration.  |  |  |  |  |  |
| Application Papers   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examiner.   |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a  | 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |  |  |  |  |  |
| <u> </u>   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  ) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |  |  |  |  |  |
|  | ocuments have been received. Ocuments have been received in Ap the priority documents have been re al Bureau (PCT Rule 17.2(a)).   | pplication No received in this National Stage  |  |  |  |  |
| Attachment(s)  |  |  |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTC</li> </ol>  |  | /Mail Date   |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PT Paper No(s)/Mail Date <u>07/13/01;01/25/02</u> .  |  | ormal Patent Application (PTO-152)   |  |  |  |  |

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1-7, 9-15, and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Castell et al (US 6,717,801).
- 2. In regards to claims 1, 7, and 9, Castell discloses a radio system for wirelessly linking digital devices (col. 5 lines 19-32), comprising: an RF transceiver (wireless transceiver 220) embodied on a PC expansion card (col. 2 lines 13-37); a host controller (wireless link adapter 200) for detecting and operating said RF transceiver expansion card wherein said controller includes logic sets for detecting and operating a plurality of expansion card types (col. 5 lines 39-45 and col. 5 lines 53-58); and a digital baseband portion, connectable to said transceiver, for establishing and managing said wireless links, said baseband portion including a plurality of components, wherein at least one of said components is integrated on said host controller (col. 5-6 lines 59-21).
- 3. In regards to claims 2 and 3, Castell discloses the radio system, wherein said RF transceiver expansion card includes only said RF transceiver, and wherein all

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components of said digital baseband are integrated on said host controller (col. 5-6 lines 59-2 and col. 6 lines 11-21).

- 4. In regards to claim 4, Castell discloses the radio system, wherein said transceiver expansion card further comprises an RF antenna (RF antenna 340) (col. 6 lines 40-45).
- 5. In regards to claim 5, Castell discloses the radio system, wherein said components include one or more of: a baseband core; at least one memory; signal processing means; a lower link controller; and at least one bus bridge (col. 3 lines 56-64 and col. 6 lines 11-21).
- 6. In regards to claim 6, Castell discloses the radio system, wherein said signal processing means comprises an interface between said RF transceiver and said lower link controller (col. 5-6 lines 59-10).
- 7. In regards to claim 10, Castell discloses the radio system, wherein said system, said transceiver, and said baseband are Bluetooth compatible (col. 5 lines 19-27 and col. 6 lines 59-65).
- 8. In regards to claim 11, Castell discloses the radio system, wherein said system, said transceiver, and said baseband are compatible with a Wireless LAN Standard (col. 5 lines 19-27 and col. 6 lines 59-65).
- 9. In regards to claims 12, 15, 17, 18, and 19, Castell discloses a method and device of detecting the presence of an expansion card using conventional PC Card specification signal lines, said method comprising the steps of: determining the signal state of first and second card detection signal lines; determining the signal state of first

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and second voltage select signal lines; determining if said first and/or second card detection signal lines, or said first and/or second voltage select signal lines, comprise a signal state that is reserved by a PC Card signal specification; and determining the signal state of a predetermined unused PC Card signal line, relative to said reserved signal state (col. 2 lines 13-37).

- 10. In regards to claims 13 and 14, Castell discloses the method, further comprising the steps of: determining the presence of a RF transceiver expansion card by determining whether said first card detection signal and said second voltage select signals are tied together (col. 5-6 lines 59-10).
- 11. In regards to claim 20, Castell discloses an integrated circuit for detecting and operating a plurality of expansion card types, comprising: a first logic set for detecting and operating a plurality of expansion card types, said first logic set having predetermined signal lines and a pinout arrangement defined according to PC Card specifications, and a second logic set for detecting and operating a Bluetooth compatible radio unit on a PC expansion card, or a Wireless LAN NIC, said first and second logic set being incorporated into a single controller, and wherein said second logic set is adapted to reassign certain ones of said predetermined signal lines to detect and operate said Bluetooth PC card or Wireless LAN NIC without requiring additional pinouts (col. 2 lines 13-37, col. 5 lines 19-27, and col. 6 lines 59-65).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castell et al (US 6,717,801).
- 13. Castell discloses all of claims 8 and 16 limitations, except the radio system, wherein said logic sets include: a first logic set for detecting and operating 16-bit PC cards; a second logic set for detecting and operating 32-bit PC cards. However, it is well known in the art, that 16-bit and 32-bit are standard for PC cards. PCMCIA (The Personal Computer Memory Card International Association) developed a new specification called CardBus, which is a 32-bit bus, as against the present 16-bit cards. CardBus is an extension of the PCI bus.

## **Conclusion**

- 14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bridgelall et al (US 6,761,316) teach a compact auto ID reader and radio frequency transceiver data collection module. Acampora (US 6,751,455) teaches a radio link management system for a home or office.
- 15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan P Knowlin whose telephone number is (703) 308-1727. The examiner can normally be reached on Mon-Fri 8:00-4:30pm.

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16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (703)305-4731. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thjuan P. Knowlin

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SUPERVISIONY PATENT EXAMINER
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